CLAIM LISTING

1.   (Currently amended) A thermostat fan and boiler timer comprising a microprocessor, an AC/DC converter, a zero crossing detector, a switching means, and a user interface, wherein the timer connects directly to an existing thermostat without the need for rewiring any [of the] existing thermostat connections.

2.   (Original) The thermostat fan and boiler timer of claim 1, wherein the timer operates without an external power source.

3.   (Currently amended) The thermostat fan and boiler timer of claim 1, further comprising interchangeable leads that can be connected on either side of [the] a fan switch.

4.   (Currently amended) The thermostat fan and boiler timer of claim 1, further comprising interchangeable leads that can be connected on either side of [the] a thermostat switch terminal[s] of a boiler system.

5.   (Original) The thermostat fan and boiler timer of claim 1, wherein a user can program the duration and interval of fan cycles.

6.   (Original) The thermostat fan and boiler timer of claim 1, wherein a user can program the duration and interval of boiler cycles.

7.   (Original) The thermostat and boiler timer of claim 1, wherein the timer causes periodic cycling of a heating system fan/blower.

8.   (Original) The thermostat and boiler timer of claim 1, wherein the timer causes periodic cycling of a boiler.

9.   (Original) The thermostat and boiler timer of claim 1, wherein the user interface comprises an LCD display and keypad.

10. (Original) The thermostat boiler and timer of claim 1, wherein the user interface comprises two LEDs and one switch.

11. (Original) The thermostat fan and boiler timer of claim 1, wherein the timer can be programmed with a single button.

12. (Original) The thermostat fan and boiler timer of claim 1, wherein the timer determines both an interval between fan cycles and a duration of fan cycles, and both the interval and duration can be programmed with a single button.

13. (Original) The thermostat fan and boiler timer of claim 1, wherein the timer determines both an interval between boiler cycles and a duration of boiler cycles, and both the interval and duration can be programmed with a single button.

14. (Original) The thermostat fan and boiler timer of claim 1, wherein the timer includes three programming variables, and all three programming variables can be programmed with a single button.

15. (Original) The thermostat fan and boiler timer of claim 14, wherein the three programming variables are interval, duration and variable timing.

16. (Original) The thermostat fan and boiler timer of claim 1, wherein the switching means is a triac.

17. (Original) The thermostat fan and boiler timer of claim 1, wherein the switching means is an electro-mechanical switch, and further comprising a battery to power the microprocessor when the switch is closed.

18. (Original) A method of circulating heated air throughout a building or structure using the thermostat fan and boiler timer of claim 1.

19.   (Original) A method of circulating hot water throughout a heating system using the thermostat fan and boiler timer of claim 1.